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HIGH FARMING
HOW FAR IS IT EXPEDIENT?
LET NATURE ANSWER.





HIGH FARMING.

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HIGH FARMING!

HOW FAR IS IT EXPEDIENT?

LET NATURE ANSWER.

BY

WM. H. HEYWOOD.

DEDICATED BY PERMISSION

TO THE

RT. HON. LORD EGERTON OF TATTON.

CHESTER:

PHILLIPSON AND GOLDER, EASTGATE ROW.

AND SOLD IN LONDON BY

GRIFFITH & FARRAN, ST. PAUL'S CHURCHYARD,
AND W. RIDGWAY, PICCADILLY.

1867.



191. k. 28.

DEDICATION.

TO

The Rt. Hon. Lord Egerton of Tatton,

THIS SMALL BOOK IS

BY PERMISSION

MOST RESPECTFULLY INSCRIBED BY THE AUTHOR,

ACTUATED BY A PROFOUND

ADMIRATION OF HIS LORDSHIP'S COURSE

IN THE

MANAGEMENT OF LARGE ESTATES,

AND IN

DEALING WITH A NUMEROUS TENANTRY,

WHICH THE PLEASING DUTY

OF AWARDING ANNUALLY HIS LORDSHIP'S PRIVATE

PREMIUMS FOR GOOD CROPS,

GOOD FARMING, &c.,

NOW FOR MANY YEARS

HAS ENGENDERED.

P R E F A C E .

In submitting the annexed paper to the public, I feel that a short comment is necessary to explain the publication of such tenets at a time so adverse to their being generally adopted ; as for instance, the advocacy of an extension of grazing, and the diminution of ploughing at a time when the ravages of the Rinderpest, &c., amongst Cattle, and apprehensions of its continuance militate strongly against the policy of such a course, and seem even to necessitate the reverse action.

I feel, however, that an emergency such as this which we all hope and trust is but a temporary one, ought not to stand in the way of good motives, especially when they are accompanied, as in this case, by a full recognition of the Source from which all needful wants are supplied, and therefore, I feel that to withhold its publication for such a reason, would in effect be a "sin of omission."

So much for the moral view of the case, but in addition to this, I maintain that expediency points to the same conclusion. I have endeavoured to show that want of attention to the requirements of

nature, in the form of due rest, &c., results in failure and decay alike to crops and Cattle ; and if this be so, I argue that to persist in ploughing so hard, and forcing so highly, may in the end terminate in such a derangement of nature's order, that the consequence may be more to our disadvantage than the adoption of these tenets even under the adverse circumstances now existing.

With these views therefore, I do not hesitate to proceed with what is intended for a good cause, and I earnestly hope and trust that good may result from so small an effort, and, if it does, even in a small degree, I shall be amply repaid and satisfied.

W. H. H.

*Dunham Massey,
Cheshire.*

CONTENTS.

INTRODUCTION.

DEFINITION.

THE generally accepted Meaning. The correct, or more practical Meaning. Inference drawn therefrom.

CAUSES AND EFFECTS.

On Expenditure. On Tillage, including Clover Brairds and Turnip Crops. Motives of the Farmer. Growing two Crops in the Year on Tillage Land. Breeding too highly. Loss of Long-horned breed of Cattle. Officious interference with Nature in Treatment of Stock. Propagation of Potatoes and Cause of Degeneration.

PECUNIARY RESULTS.

Short Clover Leys as compared with Four Years' Ley of Grass Seeds. Grazing before Dairying. Necessity of Tenants on over-rented Lands. Impolicy of Landlords.

•

PRACTICAL INFERENCES.

Consequence of Misinterpretation. Extravagant Expenditure. Delusion in Over-forcing. Mistake in Propagation. High Breeding.

ADVICE TO NEW BEGINNERS.

Agriculture, as an Occupation, very alluring. Risky, if practised without judgment. An expensive Hobby. Amateur Farming cause of High Rents.

CONCLUSION.

Necessity of Surveillance. Nature as our Guide. Seven wholesome Precepts based thereon. Recognition of Nature the first principle of Good Farming.

HIGH FARMING.

HOW FAR IS IT EXPEDIENT?

LET NATURE ANSWER.

INTRODUCTION.

HIGH FARMING is a term now become so familiar to every Englishman, and so associated and identified with the successful cultivation of the soil, that any one professing to farm at all must either pursue such a course as will entitle him to be called a high farmer, or he must submit to be classed amongst the old School of "do nothings."

Such is the universal feeling with which new beginners, and especially

young men, set out when they commence farming, and therefore, with a view to maintain that character, they labour hard to learn how this is done by diligent perusal of modern writings ; by listening to after-dinner speeches at agricultural meetings ; by touring about the country to view the experimental farming of celebrities whose grand results they return home and try to imitate if not to surpass.

Any dogma obtaining such an universal influence over an interest so all-important as agriculture in this country ought indeed to be well tested in every phase both present and prospective before being allowed to assume such an arbitrary dictation, and hence the reason for writing upon this subject.

THE DEFINITION.

In the first place we must understand what is the generally accepted definition of the term "high farming."

By high farming is generally understood

after clearing, draining, and road making, the forced production of the largest amount of crops upon a given area of land. This is effected by means of deep ploughing, strong stimulants, artificial or otherwise, two crops in the year off the same ground, clover-leys for one year only, mown twice or even oftener and given to stock in doors, bringing the same land round to the same crops, those considered the most profitable every fourth year or so, and by the possession of all new and fashionable implements and machinery, some useful, and some useless.

In like manner by keeping an excessive number of stock tied up and stall-fed, which are often too highly bred or too advanced in condition for the climate soil or its production, and consume the produce of the farm paying little for it, and at the same time enforce the growth of more green crops especially turnips than the land can bear with impunity. This excess of stock also entails the necessity of extensive buildings and premises for their accommoda-

tion, which necessarily increases not only the interest of capital but also the rent in the form of interest upon such buildings.

This course of proceeding, pursued without stint of labour, money, or any other means of coercion to force nature to an excessive yield of crops, I consider to be the practically accepted meaning of the fashionable term before us.

For my own part, I would apply much higher and more lasting tests as to what really constitutes "high farming."

As for instance, in lieu of taking the greatest possible number of crops to the exhaustion of the natural elements of production, the growth only of such a number and they of such a nature as will most improve and augment the productive elements of the soil and at the same time be equally remunerative. In fact I would consider the prospective as much as the present advantage in defining the correct sense of the term, which I maintain and hope to show is quite practicable, and consistent

with the interest both of the present and permanent occupier.

If the difference that is inferred by these views really exists between the accepted meaning of the term and that now submitted as the correct and more practical definition, it is obvious how desirable it is that the question should be at once decided, and something like an approximate rule or limit laid down as to the degree and form of outlay and forcing that may be expected to be remunerative and for permanent good.

CAUSES AND EFFECTS.

Before however proceeding to prove the above by statistical details, I would submit some general causes and effects that I consider bear much upon the question.

In the first place, "High Farming" so miscalled, invariably leads to an undue

impolitic, and hasty expenditure of capital, which, if reserved and expended more judiciously and deliberately over a little time, in more gradual but more permanent improvements, would answer the purpose of the farmer far better, and in the end obtain for him a much stronger claim to be entitled a "high farmer." And, again, in most cases it leads to an excess of tillage, with too short intervals of leys, which I consider is the greatest mistake of the present day, and the one to which I attribute many of the failures of our crops which are engaging so much attention amongst agriculturists at the present time. I allude particularly to the finger and toe, clubbing, &c., amongst turnips, the missing and falling away of clover brairds and such like, of which I will speak again.

Lastly, it leads to too much reliance upon the skill and appliances of the cultivator, and to an unwarranted habit of ignoring the elements of nature in the soil as essential to its productiveness, a

fallacy that cannot be too strongly denounced both on moral and political grounds. For we might, for instance, just as well expect to grow good clover from sawdust by the aid of artificial help as from soil by the same means; from which, by the repeated growth of clover the natural elements required to supply it have been exhausted, and which can only be replaced by the lapse of time and the gradual growth and accumulation of them again by the course of nature; thus accounting for the fact that land becomes "clover sick" sooner or later if cropped with it oftener than once in six to eight years.

In like manner I may apply the same simile to the turnip crop, the failure of which is unquestionably to be attributed in nineteen cases out of every twenty to the same cause, namely, that the land has been over wrought and exhausted of what they require by the too-repeated growth of them.

One custom (practised by high farmers)

that I object to I feel requires a little courage to avow my opinion upon, fearing that I may be thought to advocate a retrograde movement. I mean the practice of growing two tillage crops in the year upon the same land. As for instance, common late turnips after early potatoes, a thing that I admit is quite practicable, but I hold not expedient. I have frequently observed the result of this practice, which is invariably unprofitable, not directly by the crop failing to pay its expenses or even a present profit, but in its effect upon the succeeding crops of grain, clover, &c., which are always much lighter. In fact, until the land has again been green-cropped, it shows the drain upon its resources in a marked degree ; nor does extra manuring make compensation.

For the satisfaction of those who may question this, I may state, that, in the cases that have come under my notice, a portion only of the potatoe ground has been so cropped. The whole afterwards has

been sown with wheat or other grain, and so afforded unquestionable identity of the cause of the light portion of the succeeding grain or other crops.

As I have said before, I feel that I risk in some degree my reputation by inculcating such views ; but I have so often seen in such variety of forms the same result from the same practice of overforcing, that I do not hesitate to denounce it.

Pursuing the same course of argument, I maintain that, as in tillage over-cropping and forcing are impolitic and cannot lead to permanent good, so in stock does breeding them too highly result unfavourably.

I have myself observed for many years the gradual diminution of size and substance in the successive generations of Cattle, especially short-horns ; of course I speak of the class brought to the markets and that are available to the grazier, and exclude the pedigree stock of those who breed them for show beasts. I admit that

the latter are by dint of undue means kept up to good size, but even these I cannot exclude from my charge of retrogression as regards substance of flesh, which I hold is much deteriorated for grazing purposes by high breeding, and in many herds has quite lost the firmness that is so prizeable.

While on this subject, I cannot omit what I have for a long time watched in this retrograde change ; but before doing so I should say that my observations on this point have reference especially to the Northern Counties of England where the short-horns mostly prevail.

Thirty years ago, several English Counties, namely, Lancashire, Staffordshire, Warwickshire, &c., contained an original breed of long-horned cattle which were naturally slow growers and late in getting to maturity ; for which reasons they had to give place to the quicker and earlier short-horns that have now almost entirely superseded them. But though, for the two reasons stated, they have had to give place, still

they had one property, weight and substance of flesh, which has gradually gone with them. I say gradually, because I have observed, through the period of transition, that every beast showing more or less cross with them retained the proportionate degree of this essential point ; which cause and effect will at the present rate of high breeding in a few years become extinct, and then, should the same consequence still go on, I am persuaded that it is only a question of time before our breeders will have to "hark back" for more bone and muscle, and the stock best able to supply them may then, I fear, no longer exist.

By no means would I be understood to advocate the retention of the old, slow breed in preference to the new ; but I would strongly recommend their retention in small numbers, for the purpose of supplying from time to time that which without them will wane continuously, and which they alone can afford by an occasional cross.

As I am commenting upon the breeding and treatment of Cattle, and in particular upon the necessity of watching the tendencies of nature, I would submit what I have frequently and painfully felt to be a necessary caution to many to whom the care of stock is entrusted, the cause for which arises from the same impetuosity of action that I would guard against.

It is the too frequent, gratuitous and premature interference with stock at the time of parturition. This I have witnessed often and again, being officiously imposed, when nature, if left to herself, would by the aid of a little time, during which the very difficulties are producing the necessary remedies and means of relief, accomplish her own offices. And this in a manner which shows that, where there is no extraneous cause for it, the artificial interference of man is not only superfluous but often injurious.

In fact I do not hesitate to say that many more poor creatures, especially cows, are lost in consequence of too much pre-

mature, and officious help than for the want of it.

While dwelling upon causes and effects, there is another subject—the cultivation and failure of the Potatoe, which, though not quite analogous to the class of cases we have been considering, yet I attribute the origin of the failure of this vegetable to the same want of regard to the conditions of nature before recited, and therefore, eligible to be dealt with in the same category.

The Potatoe is comparatively of recent introduction into this country; still it has been grown sufficiently long to have afforded a very good knowledge of its habits and constitution, from which we have learned that any fresh variety raised from seed does not last under the mode of cultivation and forcing pursued in this country longer than twenty to thirty years, during which period of its existence, its habit is as follows :—

As a new seedling, it is generally a luxurious and vigorous grower, but the

tubers are indifferent in quality. By the growth of a few years this luxuriance subsides, and the tubers gradually improve in quality. This change still goes on until, at the age of eight to ten years, it is generally considered of good quality and a moderate grower, which character it retains for a period of say ten years, and by that time its habit of transition is realized, and though now of first-class quality, its shy brairding and growth cause it to have to give place, to some younger and more vigorous rival, and, after a few more years, it has to be given up altogether as an unhealthy and exhausted variety.

In selecting the seeds, from which to raise new varieties, the propagator has invariably chosen as the parent stock the kind most prized for its quality, which practically means a kind far on the wane as regards its period of life and state of health ; and this course of raising new varieties from parent stocks when in a declining stage of their existence, for so

many successive generations, has undoubtedly, to my mind, been the cause of the decline of the general constitution of the Potatoe.

This constitution is now happily being gradually restored by the raising of so many more new varieties than formerly, some of which being off-shoots of healthy stock, or in other words, of stock at an age of health, turn out themselves to be healthy, and so, by the same course being pursued, I hope that time will re-establish the wonted vigour of this valuable vegetable.

Thus it will be seen again, how essential it is to pay regard to the conditions of nature in cultivating what, after all our efforts, we are bound to recognise as her gift ; which recognition I maintain is the first and the very highest principle of good farming.

PECUNIARY RESULTS.

So far I have endeavoured to show

the impolicy of excessive action in farming and of extreme courses in breeding or propagating, as regards their effect upon the stock and produce upon which they have been practised. I will now endeavour in like manner to show that neither is such fast-farming advantageous in a pecuniary sense.

It is, of course, not the gross value of the produce of a farm that represents its welfare, but the margin afforded between the cost of such produce and such gross value.

Now, I maintain that it is possible to plough so hard, and to grow such a quick succession of grain and green crops, as to make such crops so light and so thin, and consequently so expensive to keep clean from weed, that the profit from a given acreage of land so cropped (after deducting the heavy expenses in wages, horse labour, manure, &c.,) is actually less than it would be if farmed on a system which allowed it to lie in grass the half of its time. The loss of profit (if any),

in the years that it might be in grass, would be quite counterbalanced by the more abundant yield of a comparatively virgin soil, requiring only half manure and half the labour in cleaning.

But, to put this point more clearly, I have prepared a statement which, I may say, is not wholly, but to a great extent, founded on the facts of two cases that have been under my observations for many years past, showing the result of farming similar land under the two systems: namely, continuous ploughing, with clover every fourth year, and the same course of tillage with intervals of four years' ley in grass.

We will assume the two farms to be of equal size, say of three hundred acres of the same description of land, sound and dry, and equally adapted for tillage or grass, and at the same rent.

Upon the farms in question (there being a good market, easy of access,) the whole of the produce is sold off, except so much as is required for the use of

the horses, and a stock of milk cows, the produce of which is sent daily to the milkseller.

To compensate for this abstraction of so great a proportion of the produce, a large quantity of manure is returned as back carriage from the market.

The two farms have been conducted much upon their present mode of management for the last forty years, and so they afford an exceptionally favourable opportunity of contrasting the effects of their respective systems.

Both farms have a considerable quantity of old turf land, consisting of water-meadows, and old pasture not adapted for tillage, say fifty acres of the former and thirty-five of the latter, leaving the quantity to be dealt with by tillage or otherwise (after deducting site of premises, roads, waste, &c.,) say two hundred acres, disposed of as follows :—

No. 1. Short Leys. No. 2. Four Years' Ley.

35 Acres Potatoes	15 Acres Potatoes
15 „ Turnips	15 „ Turnips
50 Green Crops.	30 Green Crops
50 „ Wheat	30 „ Wheat
50 „ Oats	30 „ Oats
50 „ Clover	30 „ Grass Seeds
50 „ Old Meadow	30 „ do. 2nd year
40 „ Pasture	30 „ do. 3rd „
10 „ Premises,	30 „ do. 4th „
roads,waste&c	50 „ Old Meadow
—	30 „ Pasture
300	10 „ Premises,
	roads,waste&c
	—
	300

No. 1. SHORT LEYS.

PRODUCE SOLD.

	£	s.	d.
33 Acres Potatoes yielding £15 per acre	495	0	0
45 do. Wheat do 4 qrs. at 40s., £8 do.	360	0	0
40 do. Oats do. 40 busls. at 3s., £6 do.	240	0	0
23 do. Clover do. 1½ tons at £3 10s., £5 5s. per Acre.....	120	15	0
30 do. Meadow Hay do. 1½ tons at £4, £6 per acre	180	0	0
80 tons Straw at £2 13s. 4d., per ton...	213	6	8
Produce of 25 Milk Cows, at £24 6s. 7d. per annum.....	608	4	7

Total value sold 2217 6 3

No. 1. SHORT LEYS.

EXPENSES.		£	s.	d.
Rent of 300 acres at 50s. per acre		750	0	0
Tithes		45	0	0
Rates		75	0	0
Wages 3 team men at £39	117	0	0	
„ 1 Cow-man, at £39	39	0	0	
„ 6 Labourers, at £36 8s	218	8	0	
„ 2 Boys, at £20 16s	41	12	0	
Permanent Wages		416	0	0
Do. Planting Potatoes 8 men, } 4 weeks, at 15s.	24	0	0	
„ Cleaning Potatoes, 35 acres, at 8s.	14	0	0	
„ Cleaning Turnips, 15 acres 12s	9	0	0	
„ Cleaning Wheat, 50 acres, at 4s	10	0	0	
„ Cleaning Oats, 50 acres, at 4s.	10	0	0	
Extra Wages in Cropping		67	0	0
„ Hay making, 10 men, } 4 weeks	30	0	0	
„ Mowing 10 acres, at 5s ...	25	0	0	
„ Cutting Wheat	15	0	0	
„ Ditto Oats	10	0	0	
„ Digging Potatoes	60	0	0	
Extra Wages in reaping Crops		140	0	0
Manure.....	200	0	0	
Clover Seeds, 50 acres at 12s. 6d.....	31	5	0	
Tradesmen's Bills ..	75	0	0	
Insurance.....	7	10	0	
Exchanging Cows to keep up quantity of Milk	50	0	0	
Draining Improvements and Repairs ...	75	0	0	
Contingent Expenses.....	50	0	0	
Interest on Capital £3000 at 5 per cent	150	0	0	
Total Expenses		£2191	15	0
Profit.....		£85	11	3

NO. 2. FOUR YEARS LEY.

PRODUCE SOLD.

	£	s.	d.
13 Acres Potatoes yielding £18 15s. per Acre	243	15	0
25 do. Wheat, do. 5½ qrs. at 40s. £11 do	275	0	0
10 do. Oats, do. 50 bls. at 3s. £7 10s do	75	0	0
30 do. Seeded Hay, 3rd. years Ley, 1½ tons at £3 10s. £5 5s. per acre ...	157	10	0
50 do. Meadow Hay 1½ tons at £4, £6 do.	300	0	0
30 tons of Straw, at £2 13s. 4d.	80	0	0
Produce of 40 Milk Cows at £24 6s. 7d per annum.....	973	3	4

Total value sold 2104 8 4

No. 2. FOUR YEARS LEY.

EXPENSES.

	£	s.	d.
Rent of 300 acres at 50s. per acre	750	0	0
Tithes	45	0	0
Rates	75	0	0
Wages 2 team Men, at £39	78	0	0
„ 1 Cow-man, at £39	39	0	0
„ 4 Labourers, at £36 8s	145	12	0
„ 2 Boys, at £20 16s	41	12	0
<hr/>			
Permanent Wages	304	4	0
Do. Planting Potatoes, 4 men } 8 weeks, at 15s	9	0	0
„ Cleaning Potatoes, 13 acres, at 4s.	2	12	0
„ Ditto Turnips, 15 do. at 6s	4	10	0
„ Ditto Wheat, 30 do. at 2s.	3	0	0
„ Ditto Oats, 30 do. at 2s.	3	0	0
<hr/>			
Extra Wages in Cropping	22	2	0
„ Hay making 15 men, } 4 weeks, at 15s ... }	45	0	0
„ Mowing 140 acres, at 5s.	35	0	0
„ Cutting Wheat	10	0	0
„ Ditto Oats	8	0	0
„ Digging Potatoes	22	10	0
<hr/>			
Extra Wages in reaping Crops	120	10	0
Manure	200	0	0
Grass Seeds, 30 acres at 25s	37	10	0
Tradesmen's Bills	50	0	0
Insurance	7	10	0
Exchanging Cows to keep up quantity of Milk	80	0	0
Draining Improvements and Repairs ...	75	0	0
Contingent Expenses	50	0	0
Interest on Capital £3000 at 5 per cent	150	0	0
<hr/>			
Total Expenses	1966	16	0
<hr/>			
Profit	137	12	4
<hr/>			

THE following table will analyze the above more plainly by showing the yield in quantity, and the cost per acre of cleaning, under the two systems :—

No. 1 System.

Description.	Cleansing per Acre.		Description.	Cleansing per Acre.	
	s.	d.		s.	d.
Potatoes	40	Loads of 18 stones	...	8	0
Turnips	20	Tons	...	12	0
Wheat	4	Quarters	...	4	0
Oats	40	Bushels	...	4	0

No. 2 System.

Description.	Cleansing per Acre.		Description.	Cleansing per Acre.	
	s.	d.		s.	d.
Potatoes	50	Loads of 18 stones	...	4	0
Turnips	30	Tons	...	6	0
Wheat	5½	Quarters	...	2	0
Oats	50	Bushels	...	9	0

The difference in favour of No. 2 System being upon—

Crop.	Cleaning- per cent.
Potatoes	...
Turnips	25 per cent.
Wheat	33
Oats	32
...	25
...	50
...	50
...	50
...	50

In nett money £53 per annum on a farm of 300 acres.

NORZ.—The profit shown by these statements may be thought small, which it is ; but it must be borne in mind that in addition, the farmer acquires his house rent free, and also is supplied with many of his necessaries, such as vegetables, milk, bread, &c.

GRAZING BETTER THAN DAIRYING.

Before proceeding I would here remark that, in the neighbourhood of large towns, grazing, of which sheep-keeping forms an essential part, is not so practicable in consequence of the frequent trespass by dogs. On this account the stock kept on the farms represented by my tabular statements, is wisely devoted to dairy purposes ; where such cause does not exist, I strongly recommend grazing in preference to dairying for many and various reasons.

Amongst these, I may mention its more beneficial effect upon the land by its not abstracting so much of the valuable components of the soil to be transported off the farm, as is the case in dairying. This may be plainly seen by observing the marked difference there is in the quality of the manure made under the two systems ; that from dairy stock being thin,

cold, and aqueous ; that from feeding stock being oily, rich, and of a fermenting nature ; in fact grazing or feeding, as compared with dairying, tells advantageously in a compound manner, the longer it is practised upon a farm.

And again, by the addition of sheep, which grazing incurs, a larger proportion of the seeded land may be pastured than is practicable if only cattle are kept ; and I consider that land derives much more benefit, and replenishes its exhausted virgin elements much faster in pasture than under the scythe ; a sod of four years growth that has been wholly pastured being much richer to break up for tillage crops, than if it had been wholly mown.

Here I would impress the value of a good clean sod as an element of productiveness in tillage land ; it is undoubtedly equal to if not better than half manure, and is conducive to cleanliness that also serves half the labour in weeding. I feel that I cannot lay too much

stress upon this point, as I value it as one of the chief objects to be aimed at and to be relied upon for the maintenance of "condition," to use a "horsey" term, in land.

And, now, having attached so much importance to the growth of a good sod, I ought at the same time to say something as to how it is best produced. This is to be done first by paying particular attention to the seeds sown being good, of a kind adapted to the soil and climate, and profuse in quantity ; secondly, by subsequently aiding them by such top-dressings as are best suited for the land upon which they are sown, foremost of which, where practicable, bone dust stands pre-eminent, and will, under favourable circumstances, by being pastured, produce a sod in a few years that formerly, under ordinary treatment, it took twenty years to grow.

A sod so grown will break up mellow, through the percolation of the luxuriant herbage that the bones have produced, and

oily and rich to a degree that in ploughing it will cast off an aroma that to an invalid acquiring convalescence, will give an impetus that can be obtained in no other way. And, moreover, it will produce crops in a manner that makes all the arts and appliances of man, as a means to the same end, but an artificial substitute.

Again, I consider the risk of disease is much greater in dairy than in grazing stock. I mean not only from distempers but also from the ordinary casualties to which cattle are and ever were liable; the fact of their giving milk keeping them at all times in a comparatively low habit, and consequently very generally susceptible. And, again, the expense of attendance, and the general wear and tear are less under the system of grazing, as are also the risks of making bad debts; inasmuch as cattle, fat or otherwise, can more surely be sold for cash than a daily supply of milk which has to be credited to a precarious class of customers.

FINANCIAL RESULTS CONTINUED.

To resume, it will be seen by the foregoing statements, that neither in a pecuniary sense is there advantage in such undue overworking of land ; as in the case before us the more moderate system can be made to yield a greater profit than the excessive one by a difference of fifty-three pounds upon a farm of three hundred acres.

OTHER GENERAL RESULTS.

But I consider this is only the superficial view of the matter, the material one being the effect of the two systems upon the land on which, they are practised. This effect I maintain, is gradually to wear out and exhaust the capabilities of the land under the system No. 1, whereas the continuance of the system No. 2, will as gradually improve and increase them. And so,

viewing the matter prospectively, the result is obvious, namely, that by the former a man will sooner or later farm himself off his farm, by the latter his position will by degrees be amended, his profits increased, and his farm improved alike for the permanent good of himself and his landlord.

It may be said "very good so far as the interest of the tenant and the landlord is concerned, but does not system No. 1 afford the greatest amount of crops and labour, and so contribute more to the general weal of the country"?

In answer to this I confidently say "No," because, though such may be the case for a time in some instances that may be adduced, yet let the test be only of sufficient duration, and the systems will certainly reverse their relative position as regards the aggregate value of their produce.

The tendency of my opinions thus far expressed has been upon the tenant or occupier of the land; but I think,

while discussing this phase of the agricultural interest, I may do good by pointing out that the landlord may also, by mistaken policy, conduce to the state of things I am referring to by over renting his land.

This may not in all cases be done from exacting or selfish motives, but under the impression or conviction that too low a rent is often an incentive to indolence and bad farming.

Such in some cases is the fact, especially where there is no watchfulness on the part or behalf of the landlord over the conduct of the tenant, but seldom where this interest in the actions of the tenant is judiciously exercised.

In some cases, in which I have spoken to tenants on this subject, they have answered me "well but my rent is so high that I could not pay it if I did not work my land to this degree." Now this to a certain extent is true, namely, where there is capital in the

land in the shape of unexhausted elements of production, which a tenant who is over rented is obliged to draw upon to meet his necessity ; but this practice if continued long enough will soon exhaust such capital.

The fallacy of such a course is too plain, and it will certainly, sooner or later, come to an end, and must of necessity be succeeded by a reduction of rent to enable a tenant to live upon the farm. And now, to enable nature by the prudence of a good tenant to restore the elements so wasted or over drawn, the landlord will have to submit to an extraordinary reduction during the term of grace, or I should perhaps more properly say fallow, which can alone rectify such abuse.

Thus it will be seen that it is the interest of the Landlord also to adopt and encourage a moderate course in dealing with land ; in proof of which I could instance cases of poor land being brought under the conjoined,

judicious management of a good landlord and a good tenant, to a high state of productiveness and value.

But, as in the cases of the tenants I have cited, so some landlords may rejoin and say that they can not afford to let their land below the rack rent it commands under the competition of the present day. Equally false is this view of their interest. A few years of forbearance in rent, coupled with co-operation with the tenant in the development of his farm, (even though the landlord's part does not amount to more than a lively interest and encouragement in the form of a good understanding and confidence,) will be compensated by an increased value both annual and freehold, which, if realized, would pay a handsome per centage upon any reasonable outlay or temporary concession of rent.

PRACTICAL INFERENCES FROM THE ABOVE.

Taking these in the order of our subjects, I may submit, first, that by many and especially young men and new beginners the term "high farming" is wrongly interpreted, and under the erroneous sense is calculated to mislead and do harm. Read correctly, it may be used as a term synonymous with all that is good in farming, and so be an incentive to those who adopt it as a system.

Secondly, an adequate capital may be lavished in impetuous ideas at the commencement of a farmer's career, that if more carefully and more gradually expended in improvements of a permanent nature, would in after years serve his purposes much more beneficially.

Thirdly, in cultivation much may be done in a way that, until its effects have been realized in failing crops which

have gradually become more expensive to grow, may be easily mistaken for good farming.

Fourthly, in propagation it is not to be forgotten that vegetable life is susceptible of being impaired by unnatural or injudicious treatment quite as much as animal life.

Fifthly, in breeding stock the aim of the breeder may be pitched too high, and blood, and fashionable points may be obtained at the cost and loss of properties intrinsically more valuable.

ADVICE TO NEW BEGINNERS.

Before concluding, I would give a few words of advice to those who are desirous to embark into farming without having first served the necessary apprenticeship to it.

I conceive that such advice may be of service to many, as I do not know any business or calling so alluring as that of farming, or again so dangerous

in a pecuniary sense unless practised with a fair amount of judgment.

In the hands of an experienced agriculturist, the occupation of farming is taken by many inexperienced to be a pleasant kind of amusement or recreation, that may be indulged in, (by any who have the recognised capital necessary for the size of the farm) with perfect safety at least against loss, and with almost a certainty of gain.

With these views many embark into it, placing reliance on the management of a deputy in lieu of the personal knowledge of the principal.

Now, although this may and does answer in some cases, I hold that such are the exception, the rule being that disappointment and loss are the result of such undertakings; and, so far from farming being a pursuit in which a person cannot lose much, I maintain that, speaking comparatively, it can, in proportion to the capital employed, lose as much money as any other business, and

especially to those who without experience set out to practice it either personally or by deputy, with the fast and impetuous ideas I have been giving a caution against. In other words, farming in inexperienced hands, is and has been proved by many to be a very expensive hobby. Nor does the evil of its pursuit in this way end here ; another serious consequence being that the same sanguine inexperience causes an undue competition for farms and a consequent artificially high value to land ; and this is, as I have before said, one of the main causes of its being so overwrought.

CONCLUSION.

In conclusion, I consider that farming as an occupation is one to which much greater responsibility attaches than is generally attributed to it, and is one that ought not to be undertaken as a plaything regardless of the higher motives of which it is so peculiarly capable. In

fact I think that, considering the limited area and the great demand for land in this kingdom, it would not be more than a necessary, and certainly a salutary encroachment upon our liberty, to make those who take upon themselves this responsibility amenable in some degree to the law for waste committed in the exercise of the trust ; either by allowing land to lie idle and unproductive on the one hand, or by abuse and unnatural treatment corresponding to "Cruelty" in in our law for protection of animal life on the other.

To sum up the substance of these views, a person embarking into farming should be actuated by the following motives—To aim at such an amount of crops and those of such a nature as will not only maintain but increase the productiveness of the land. And, in dealing with Stock, he should use the same prudence, not losing the substance in search of the shadow. And the Agriculturist should do this by applying

his skill and energies rather in assisting Nature in her efforts to promote respectively vegetation and development, than to set up that skill and energy as his sole reliance and as if she had nothing whatever to do with the matter ; a delusion which, as I have said before, cannot be too strongly denounced both on moral and political grounds.

Thus

He should clear
and rid the land of
all superfluous hed-
ges, timber, &c.,

He should drain
thoroughly and
deeply.

He should plough
deep and pulverise
well.

To

Admit more
freely her action in
the form of air,
light, warmth, and
free ventilation.

To allow rain and
the warmth of the
sun to penetrate to
a greater depth
with their fructi-
fying influences.

To afford more
latitude for the
growth of roots and

the exposure of a greater amount of soil to the benign influences of the atmosphere:

He should clean
his crops well.

That none of
her bounty be wasted in the support
of worthless weeds.

And in doing this

He should scarify well and deep
amongst his green
crops while young.

To help, by the shaking, fracturing action upon the soil, the extension of the fibrous roots of the plant, which office nature herself will perform by the action of the wind when they are in a more advanced stage.

He should from
time to time change

As he sees nature
by the agency

his seed from various soils.

He should eat off his seeds with sheep or other stock as much as possible and confine the scythe to water meadows or other strong land more capable of bearing it.

He should allow his land to rest occasionally from its labour of producing tillage crops.

of the wind, floods, birds, &c., perform the same function.

Thereby availing himself of the beneficial effect of nature's scissors which are enriching, whereas the scythe is pernicious and exhausting

That it may recover and replenish its resources that have been drawn upon, and again acquire that freshness that will fit it for the yield of another course of strong and inexpensive crops.

He should also, in dealing with stock pursue the same course in many ways that a little reflection will render so obvious as to make it quite unnecessary to particularise them.

In fine, be it in cultivation or in management of stock, the man who forgets the Source of all he is seeking, and sets aside all dependence but upon his own appliances, unless machine-like he is led by habit, or precept of others to natural courses, will assuredly fail in his undertaking.

Seeing, therefore, the important part that nature performs in all the departments of agriculture, and that we are obliged after all our efforts to acknowledge that the returns are but her gifts, I think we are also bound both logically and morally to confess that the recognition of nature, as the chief and all-important agent that we are dependent upon, is the first and highest principle of good farming by whatever name it may be called.

W. H. H.



